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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,523	03/01/2004	Kwen Hsu	TRW(AP)6499	3275

26294 7590 03/15/2006

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EXAMINER

FLEMING, FAYE M

ART UNIT PAPER NUMBER

3616

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,523

Applicant(s)

HSU ET AL.

Examiner

Faye M. Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-17 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (6,913,281).

Takahashi discloses an apparatus for helping to protect an occupant of a vehicle that has a side structure and a roof, the apparatus comprising an inflatable curtain 11 having a front portion 11b and a rear portion 11c; an inflation fluid source 12; and a fill tube 13, having a portion extending into one of the front and rear portions and terminating in the one of the front and rear portions, the fill tube having an open end portion for directing inflation fluid to flow axially from the fill tube into the inflatable curtain and at least one aperture 13a for directing inflation fluid to flow generally radially from the fill tube into the inflatable curtain. The open end portion directs inflation fluid into the other of the front and rear portions, the at least one aperture directing inflation fluid into the one of the front and rear portions. The front portion of the inflatable

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curtain comprises at least one inflatable front chamber inflatable between the side structure and front seating of the vehicle, the rear portion of the inflatable curtain comprising at least one inflatable rear chamber inflatable between the side structure and rear seating of the vehicle. The portion of the fill tube is positioned in the rear portion of the inflatable curtain, the open end portion directing inflation fluid into the front portion and into the at least one front chamber, the apertures 13e-13g directing the inflation fluid into the rear portion and into the at least one rear chamber. The fill tube 13 enters the inflatable curtain through a rear edge of the inflatable curtain at a location adjacent an upper edge of the inflatable curtain. The open end portion of the fill tube is positioned in the rear portion adjacent a C pillar of the vehicle, the fill tube entering the inflatable curtain through a rear edge of the inflatable curtain at a location adjacent an upper edge of the inflatable curtain. A portion of the fill tube is positioned in the front portion of the inflatable curtain, the open end portion directing inflation fluid into the rear portion and into the at least one rear chamber, the apertures 13a-13d directing the inflation fluid into the front portion and into the at least one front chamber. The fill tube 13 enters the inflatable curtain through a front edge of the inflatable curtain at a location adjacent an upper edge of the inflatable curtain. A non-inflatable portion 11a is disposed between the front and rear portions and a passage providing fluid communication between the front and rear portions, the open end portion of the fill tube directing inflation fluid through the passage into the other of the front and rear portions. The portion of the fill tube has a length sufficient to position the open end portion near the passage. The passage extends along an upper edge of the inflatable curtain above the non-inflatable portion. The fill tube 13 extends into the one of the front and rear portions along an upper edge of the inflatable curtain, the open end portion directing the inflation fluid along the upper edge into the passage. The non-inflatable portion helps define the passage. The portion of the fill tube has a length sufficient to extend along at least 25% of the length of the one of the front and rear portions. The open end

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portion of the fill tube directs inflation fluid into the inflatable curtain in a direction generally parallel to a longitudinal axis of the fill tube, the at least one aperture directing inflation fluid into the inflatable curtain in a direction transverse to the longitudinal axis. The direction transverse to the longitudinal axis is generally vertically downward in the vehicle. The open end portion and the at least one aperture have flow areas that are proportional to the inflatable volume of the other of the front and rear portions and the one of the front and rear portions, respectively.

Regarding claims 19 and 20, as broadly recited, Takahashi teaches the fill tube 13 having a portion extending into the at least one second chamber and/or rear chamber 11b and terminating in the at least one second chamber 11b and at least one aperture 13a for directing inflation fluid in a downward direction into the at least one second chamber. The fill tube 13 including at least one aperture for directing a generally radial flow of inflation fluid from the fill tube to help reduce pressure drop in the inflatable curtain induced by the axial flow of inflation fluid from the open end portion.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (6,913,281) in view of Tanase, et al. (20020105174).

Takahashi discloses the claimed invention except for a metal fill tube and the inflatable curtain having at least one portion clamped to the fill tube. Tanase discloses a head protecting airbag device comprising a metal fill tube 32 and an inflatable curtain having one portion clamped to the fill tube, see

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paragraph [0040]. Based on the teachings of Tanase, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a metal fill tube to provide strength and to have the inflatable curtain clamped to the fill tube to provide a secure apparatus.


Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye M. Fleming whose telephone number is (571) 272-6672. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Faye M. Fleming
Primary Examiner
Art Unit 3616
03/10/04